

## **Oral Health in New Hampshire**

*Editor's Note: This edition of the Communicable Disease Bulletin contains an article written from the Chronic Disease Division of the New Hampshire Department of Health and Human Services.*

With the introduction of fluoridation in Manchester and continuing problems in obtaining dental care for the underserved population, there has been renewed interest in oral health as a public health issue in New Hampshire. The Oral Health Program recently compiled data available to the New Hampshire Department of Health and Human Services on oral health in the state. The following is a summary of that report.

### **Fluoridation**

Fluoridation of drinking water is a major factor responsible for the decline in tooth decay during the past 50 years. It is considered one of the ten greatest public health accomplishments of the 20<sup>th</sup> century<sup>1</sup>. There are currently 11 communities in New Hampshire that fluoridate their public water supply (Figure 1)<sup>2</sup>. Approximately 43% of New Hampshire residents served by a community water system receive fluoridated water.

In addition, an unknown number of New Hampshire residents obtain water, mainly from wells, that is naturally fluoridated. Fluoride is found more commonly in wells in the Mt. Washington Valley region and in the area from northern Wolfeboro through Franconia Notch<sup>3</sup>. The "Healthy New Hampshire 2010" objective is to provide fluoridated wa-

ter to 65% of state residents on a public supply system<sup>4</sup>. Nationwide, 66% of persons on a public water supply received fluoridated water in 2000<sup>5</sup>.

### **Insurance Coverage**

Access to dental care is often dependent on insurance coverage. Data from the 1999 New Hampshire Health Insurance Coverage and Access Survey showed that 26% of New Hampshire residents did not have dental insurance. Adults were somewhat more likely to be uninsured than children (27% versus 22%). Coverage status was associated with income. Thirty-nine percent of those whose income was  $\leq 200\%$  of the federal poverty level were uninsured compared to 22% of those whose incomes were higher. Lack of dental insurance also varied widely by Hospital Service Areas (HSA) throughout the state, ranging from 18% in the Derry HSA to 55% in the Colebrook HSA.

### **Dental Visits**

Obtaining dental care on a regular basis is needed for receipt of preventive services, as well as treatment of disease prior to the onset of complications. Data from the 1999 New Hampshire Behavioral Risk Factor Surveillance System indicated that 72% of adults had visited the dentist during the past year. There was a statistically significant association between visiting a dentist and both education level and income.

For example, college graduates were almost twice as likely to have seen a dentist during the past year as were persons who did not gradu-

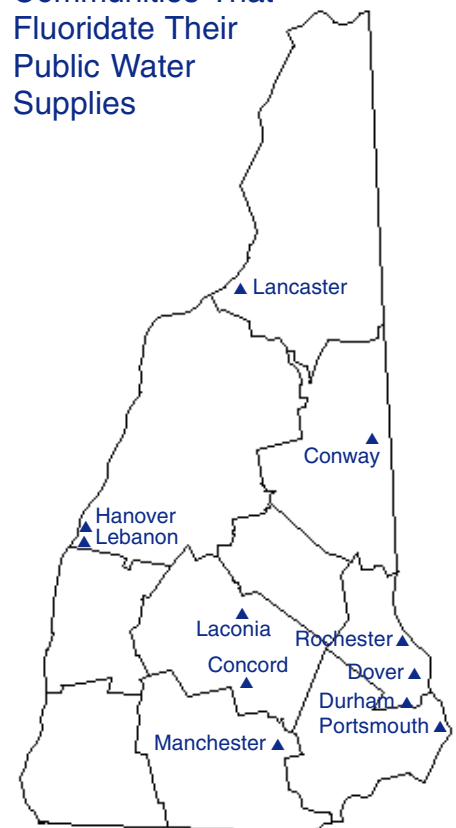
ate from high school.

The 1999 New Hampshire Health Insurance Coverage and Access Survey produced similar findings. Dental visits were associated with income and insurance status. The percentage of adults visiting a dentist in the past year also varied by hospital service

*Continued next page*

Figure 1

**Communities That  
Fluoridate Their  
Public Water  
Supplies**



area, ranging from 84% in the Exeter HSA to 65% in the Claremont HSA.

### Oral Health Status of 3<sup>rd</sup> Grade Students

Conducting school-based screenings is one method for obtaining information on the oral health status of a population. A statewide survey of the oral health status of 3<sup>rd</sup> grade students was conducted from February through April 2001<sup>6</sup>.

Twenty-six schools participated in the survey and 410 students were screened. Twenty-two percent of students were found to have untreated decay, 52% had a history of caries (i.e., either treated or untreated decay), and 46% had at least one sealant on their permanent molars.

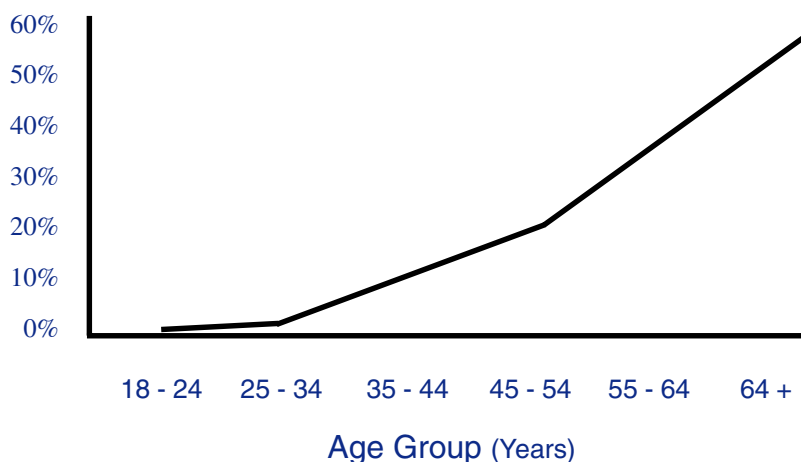
Overall, 70% of students had no obvious problems, 25% required early dental care, and 5% required urgent care.

### Tooth Loss

Tooth loss, especially edentulism, can reduce daily functioning and a person's self image. Data from the 1999 New Hampshire Behavioral Risk Factor Surveillance System showed that 8% of New Hampshire residents were edentulous. Tooth loss was strongly associated with age (Figure 2); 25% of persons  $\geq 65$  years of age had lost all of their teeth. There were also strong associations between tooth loss and both income and education.

For example, 66% of adults with less than a high school education had

Figure 2  
Adults Who Have Lost 6 or More Teeth Due to Decay or Gum Disease by Age Group (NH 1999)



lost six or more teeth due to decay or gum disease compared with 10% of adults with a college education.

### Oral Cancer

It is estimated that 75% of oral cancer is attributable to tobacco and alcohol use. Based on data from the state cancer registry, there are approximately 118 new cases of oral cancer in New Hampshire each year. About two-thirds of cases occur in males.

In addition, there are about 50 deaths from oral cancer in the state each year. Again, males comprise about two-thirds of the total.

### Summary

The data indicate that oral health problems - such as dental caries in children and tooth loss in adults - are still common in New Hampshire residents. Effective preventive measures such as water fluoridation and dental sealants are underused.

There are also marked disparities in oral health by socioeconomic status. Individuals who have lower incomes, less education, or no insurance are substantially more likely to be unable to access care and to have more dental problems. There is much progress that needs to be made if New Hampshire is to achieve the state and national oral health objectives established for the year 2010<sup>4,7</sup>.

The Oral Health Program and its partners in the state will use these data in several ways: 1) to document the magnitude of oral health problems in New Hampshire, 2) to monitor trends over time, 3) to detect changes in health care practices, 4)

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to evaluate control strategies, and 5) to facilitate planning. The goal is to improve the oral health status of the state's residents through prevention and improved access to treatment.

For a copy of the full report, *Oral Health Data – New Hampshire, 2001*, please contact the Oral Health Program at 271-4535.

### Author Bio

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### References

- 1.CDC. "Changes in the public health system."MMWR 1999;48:1141-1147.
- 2.New Hampshire Department of Environmental Services. "New Hampshire public water systems that add fluoride" (Environmental fact sheet WD-WSEB-5-1). Concord, NH, 1996.
- 3.New Hampshire Department of Environmental Services. "Public water systems in New Hampshire with naturally occurring fluoride" (Environmental fact sheet WD-WSEB-5-2). Concord, NH, 1996.
- 4.New Hampshire Department of Health and Human Services. "Healthy New Hampshire 2010." Concord, New Hampshire, 2001.
- 5.CDC. "Populations receiving optimally fluoridated public drinking water – United States, 2000."MMWR 2002;7:144-7.
- 6.CDC. "Oral health survey of third grade students – New Hampshire, 2001."MMWR 2001;12:259-60.
- 7.US Department of Health and Human Services. "Healthy People 2010" (conference ed, 2 vols). Washington, DC: US Department of Health and Human Services, 2000.



## Tuberculin Skin Testing Eliminated for Child Care Personnel

The New Hampshire Tuberculosis Program in conjunction with the Bureau of Child Care Licensing recently approved policy changes eliminating the need for child care personnel to routinely have a tuberculin skin test upon employment or repeat skin tests every three years.

This change is based upon guidance from the Centers for Disease Control and Prevention that recommends tuberculin skin testing be targeted to groups with risk factors for tuberculosis (TB). Child care personnel do not have occupational risk factors for TB, but may have individual risk factors that would support the need for a skin test.

Risk factors may include:

- History of exposure to someone with active disease.
- Having a medical condition or being on medications that suppress the immune system.
- History of travel or extended stays in an endemic country.

workers and a TB risk assessment questionnaire can be obtained from the TB Program.

The new recommendations can also be found at the New Hampshire Department of Health and Human Services website at:

[www.dhhs.state.nh.us](http://www.dhhs.state.nh.us)

When reaching the site, click on "Prevention and Promotion" then "New Hampshire Communicable Disease Control and Surveillance," followed by "Provider Information" and finally "Official New Hampshire Tuberculosis Statements."

If you would like additional information, contact the Bureau of Disease Control at 271-4469 or the Bureau of Child Care Licensing at 271-4624.

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A copy of the new recommendations for skin testing of child care

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## Communicable Disease Reports

### No Fax Policy

Public health disease surveillance systems collect essential epidemiological information on many diseases and conditions. At the Office of Public and Community Health, assurance of patient confidentiality is our highest priority. Therefore, we continuously evaluate our system in order to maintain an exceptional level of system confidentiality and security with all public health disease surveillance data.

This evaluation process serves to enhance our existing practices and procedures.

We do wish to inform health care providers statewide of the Division of Epidemiology and Vital Statistics 'no fax policy' for all HIV/AIDS surveillance data, both incoming and outgoing communication.

HIV/AIDS information includes: HIV antibody tests, HIV viral load tests, CD4 lymphocyte counts and *Pneumocystis carini* pneumonia reports.

Alternatively, we request that all HIV/AIDS information either be confidentially telephoned or mailed to:

STD/HIV Surveillance Coordinator  
Bureau of Communicable Disease  
Surveillance  
6 Hazen Drive  
Concord, NH 03301  
603-271-3932

Additionally, we restrict outgoing fax communication for all other communicable disease information containing patient identifiers.

All (non-HIV) communicable disease information may continue to be reported by fax and will be received by a secure fax machine with restricted access.

All confidential communications to out of state health departments are conducted by telephone or by mail.

The NH Department of Health and Human Services appreciates your ongoing support of public health disease surveillance.

If you have any questions or concerns about disease reporting please call 800- 852-3345, ext 0279 in New Hampshire or 603-271-0279.